COMPLETE LISTING OF CLAIMS, INCORPORATING AMENDMENTS IN RESPONSE TO OFFICE ACTION DATED 8/22/2006 FOR SERIAL NO. 10/721,996

CLAIMS

What is claimed is:

- (Currently Amended) An isolated and purified mutant gene encoding a isoxaben resistant cellulose synthase comprising a cellulose synthase gene with a specified nucleic acid sequence, wherein the nucleic acid sequence comprises the nucleotide sequence of SEQ ID NO: 1.
- 2. (Canceled)
- 3. (Canceled)
- 4. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises the nucleotide sequence of SEQ ID NO: 2, or degenerate variant of SEQ ID NO; 2.
- 5. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises at least 20 contiguous nucleotides of SEQ ID NO: 2, including nucleotides 2992-2994 of SEQ ID NO: 2.
- 6. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises the nucleotide sequence of SEQ ID NO: 3, or degenerate variant of SEQ ID NO; 3.
- 7. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises at least 20 contiguous nucleotides of SEQ ID NO: 3, including nucleotides 2992-2994 and 3160-3162 of SEQ ID NO: 3.
- 8. (Currently Amended) An isolated and purified mutant gene encoding a isoxaben

 resistant cellulose synthase comprising a cellulose synthase gene with a specified

 nucleic acid sequence The mutant gene of claim 1, wherein the nucleic acid sequence

 comprises the nucleotide sequence of SEQ ID NO: 4, or degenerate variant of SEQ ID

NO; 4.

- 9. (Canceled)
- 10. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises the nucleotide sequence of SEQ ID NO: 6, or a degenerate variant of SEQ ID NO; 6.
- 11. (Withdrawn) The mutant gene of claim 1, wherein the nucleic acid sequence comprises at least 20 contiguous nucleotides of SEQ ID NO: 6, including nucleotides 2292-2294 of SEQ ID NO: 6.
- 12. (Canceled)
- 13. (Canceled)
- 14. (Canceled)
- 15. (Canceled)
- 16. (Canceled)
- 17. (Canceled)